



Khoa Công Nghệ Thông Tin Trường Đại Học Cần Thơ

Dynamic HTML



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Cần Thơ
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- Giới thiệu
- Cascading Style Sheets (CSS)
- Document Object Model (DOM)
- Sự kiện (events)

- **Giới thiệu**

- Cascading Style Sheets (CSS)

- Document Object Model (DOM)

- Sự kiện (events)

Giới thiệu về DHTML

■ DHTML là gì ?

- Không là chuẩn định nghĩa bởi W3C mà do các nhà cung cấp trình duyệt Web hỗ trợ cho chuẩn 4.x
- DHTML kết hợp nhiều công nghệ để hỗ trợ thiết kế trang Web
- Người sử dụng có thể định dạng được sự hiển thị của các thành phần trong cửa sổ browser
- HTML 4.0 tách rời việc trình bày tài liệu ra khỏi cấu trúc của nó

Giới thiệu về DHTML

■ CSS

- Dùng để định style và layout của các tài liệu HTML
- Định dạng chỉ 1 lần cho mỗi thành phần của trang HTML, sau đó ta có thể áp dụng định dạng này cho các trang khác
- Chỉ cần thay đổi định dạng, tất cả các thành phần khác đều tự động được cập nhật theo

■ DOM

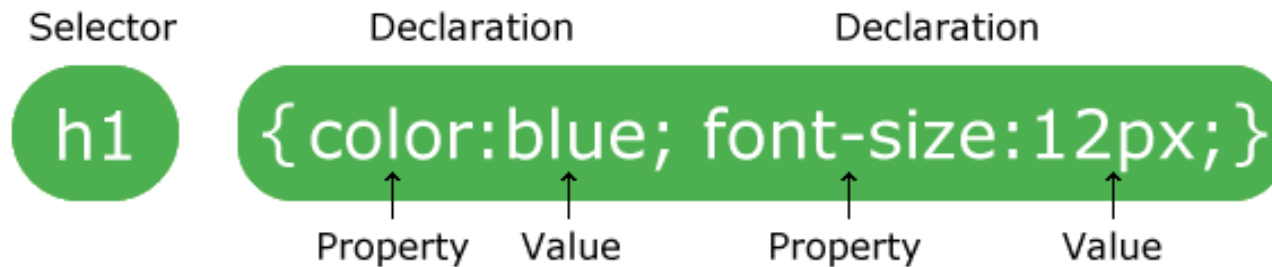
- Định nghĩa tập hợp của những đối tượng cho trang HTML thông qua đó ta có thể truy cập và khai thác các đối tượng
- W3C Document Object Model (DOM) : cho phép chương trình và các scripts truy cập một cách động, cập nhật nội dung, cấu trúc và định dạng của các tài liệu HTML
- Javascript có thể điều khiển được tất cả các thành phần trong trang Web

-
- Giới thiệu
 - **Cascading Style Sheets (CSS)**
 - Document Object Model (DOM)
 - Sự kiện (events)

CSS

■ Cú pháp CSS

- selector: phần tử HTML muốn định dạng
- declaration: cặp {thuộc tính: giá trị;}



CSS (selector)

```
<html>
<head>
<style>
p {
  color: red;
  text-align: center;
}
</style>
</head>
<body>

<p>Hello World!</p>
<p>These paragraphs are styled with CSS.</p>

</body>
</html>
```

Hello World!

These paragraphs are styled with CSS.

CSS (id)

```
<html>
<head>
<style>
#para1 {
    text-align: center;
    color: red;
}
</style>
</head>
<body>

<p id="para1">Hello World!</p>
<p>This paragraph is not affected by the style.</p>

</body>
</html>
```

Hello World!

This paragraph is not affected by the style.

CSS (class)

```
<html>
<head>
<style>
.center {
    text-align: center;
    color: red;
}
</style>
</head>
<body>

<h1 class="center">Red and center-aligned heading</h1>
<p class="center">Red and center-aligned paragraph.</p>

</body>
</html>
```

Red and center-aligned heading

Red and center-aligned paragraph.

CSS (group)

```
<html>
<head>
<style>
h1, h2, p {
  text-align: center;
  color: red;
}
</style>
</head>
<body>

<h1>Hello World!</h1>
<h2>Smaller heading!</h2>
<p>This is a paragraph.</p>

</body>
</html>
```

Hello World!

Smaller heading!

This is a paragraph.

CSS

- External style sheet

```
<head>  
<link rel="stylesheet" type="text/css" href="mystyle.css">  
</head>
```

- Internal style sheet

```
<head>  
<style>  
h1 {  
    color: orange;  
}  
</style>  
</head>
```

- Inline style

```
<h1 style="color:blue;margin-left:30px;">This is a heading</h1>
```

CSS

■ CSS định vị trí hiển thị

- position:relative
- position:absolute
- Các thuộc tính : left, top, visibility, z-index
- Ví dụ 1 :

```
div
{
position:relative;
left:10;
}
```

CSS

■ CSS định vị trí hiển thị

- Ví dụ 2 :

div

{

position:absolute;

left:10;

}

CSS

```
<html>

<head>
<style>
h1.ex1
{
position:relative;
left:20px;
}
h1.ex2
{
position:relative;
left:-20px;
}
</style>
</head>

<body>
<h1>Normal Heading</h1>
<h1 class="ex1">Heading +20</h1>
<h1 class="ex2">Heading -20</h1>

<p>
Relative positioning moves an element relative
to its original position.
```

Normal Heading

Heading +20

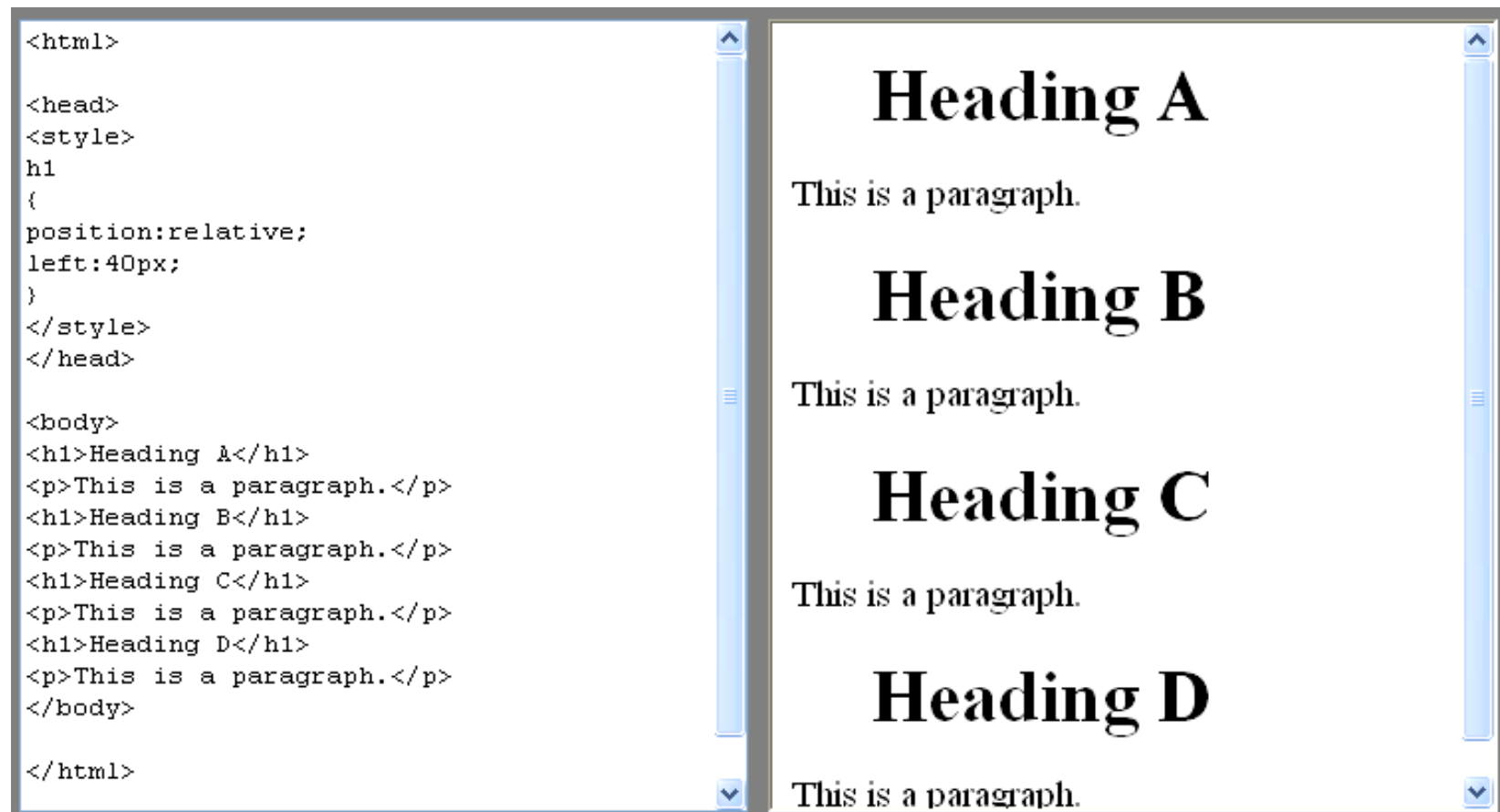
Heading -20

Relative positioning moves an element relative to its original position.

"left:20" adds 20 pixels to the element's LEFT position.

"left:-20" subtracts 20 pixels from the element's LEFT position.

CSS



CSS

```
<html>
<head>
<style>
h1.x
{
position:absolute;
left:100px;
top:150px;
}
</style>
</head>

<body>

<h1 class="x">This is a heading</h1>

<p>With absolute positioning, an element can be
placed anywhere on a page.</p>

<p>The LEFT position of the heading is 100 pixels
from the left of the page.
The TOP position is 150 pixels from the top of the
page.</p>

</body>
```

With absolute positioning, an element can be placed anywhere on a page.

The LEFT position of the heading is 100 pixels from the left of the page. The TOP position is 150 pixels from the top of the page.

This is a heading

CSS

■ CSS cho phép hiển thị

- Ví dụ 3 :

```
h1
{
visibility:visible;
}
```

- Ví dụ 4 :

```
h1
{
visibility:hidden;
}
```

CSS

```
<html>
<head>
<style>
h1.one
{
visibility:visible;
}
h1.two
{
visibility:hidden;
}
</style>
</head>
<body>

<h1 class="one">Heading one</h1>
<h1 class="two">Heading two</h1>

<p>Where is heading two?</p>

</body>
</html>
```

Heading one

Where is heading two?

CSS

■ CSS định dạng chỉ số z

- Dùng để đặt phần tử ở sau phần tử khác, mặc định là 0
- Chỉ số z càng lớn thì độ ưu tiên càng cao
- Ví dụ 5 :

```
h1
{
  z-index:1;
}
```

```
h2
{
  z-index:2;
}
```

DHTML CSS

```
<html>

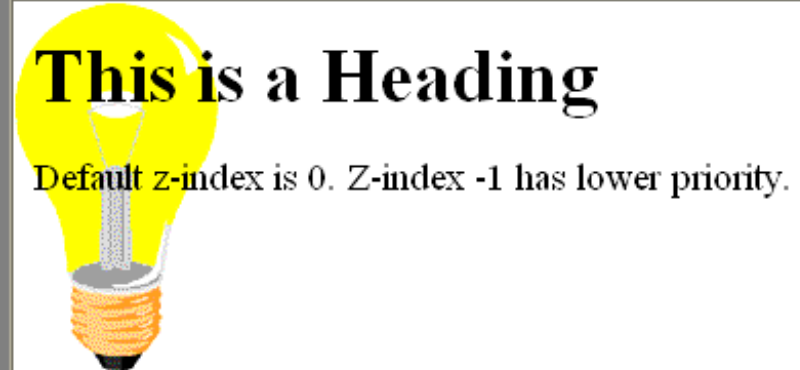
<head>
<style>
img.x
{
position:absolute;
left:0px;
top:0px;
z-index:-1;
}
</style>
</head>

<body>

<h1>This is a Heading</h1>


<p>Default z-index is 0. Z-index -1 has lower
priority.</p>

</body>
</html>
```



CSS

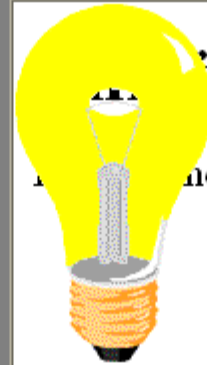
```
<html>

<head>
<style>
img.x
{
position:absolute;
left:0px;
top:0px;
z-index:1;
}
</style>
</head>

<body>

<h1>This is a Heading</h1>


<p>Default z-index is 0. Z-index 1 has higher
priority.</p>
</body>
</html>
```



This is a Heading

Default z-index is 0. Z-index 1 has higher priority.

CSS

```
<html>
<body>

<h1 style="background-color:DodgerBlue;">Hello
World</h1>

<p style="background-color:Tomato;">
Lorem ipsum dolor sit amet, consectetur
adipiscing elit, sed diam nonummy nibh euismod
tincidunt ut laoreet dolore magna aliquam erat
volutpat.
</p>

</body>
</html>
```

Hello World

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

CSS

```
<html>
<body>

<h1 style="border: 2px solid Tomato;">Hello World</h1>

<h1 style="border: 2px solid DodgerBlue;">Hello World</h1>

<h1 style="border: 2px solid Violet;">Hello World</h1>

</body>
</html>
```

Hello World

Hello World

Hello World

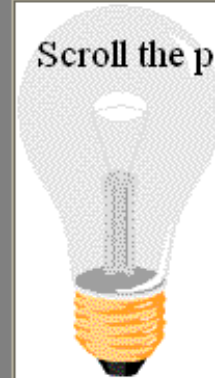
CSS

- CSS định dạng màu nền
 - background-attachment:scroll
 - background-attachment:fixed

CSS (background)

```
<html>
<head>
<style>
body
{
background-attachment: fixed;
background-image: url("bulboff.gif");
background-repeat: no-repeat;
}
</style>
</head>
<body>

<p>Scroll the page and see what happens</p>
<br /><br /><br /><br /><br /><br /><br />
<p>Scroll the page and see what happens</p>
<br /><br /><br /><br /><br /><br /><br />
<p>Scroll the page and see what happens</p>
<br /><br /><br /><br /><br /><br /><br />
<p>Scroll the page and see what happens</p>
<br /><br /><br /><br /><br /><br /><br />
<p>Scroll the page and see what happens</p>
<br /><br /><br /><br /><br /><br /><br />
<p>Scroll the page and see what happens</p>
```



Scroll the page and see what happens

Scroll the page and see what happens

CSS (border)

```
<html><head><style>
p.dotted {border-style: dotted;}
p.dashed {border-style: dashed;}
p.solid {border-style: solid;}
p.double {border-style: double;}
p.groove {border-style: groove;}
p.ridge {border-style: ridge;}
p.inset {border-style: inset;}
p.outset {border-style: outset;}
p.none {border-style: none;}
p.hidden {border-style: hidden;}
p.mix {border-style: dotted dashed solid double;}
</style></head>
<body>
<p class="dotted">A dotted border.</p>
<p class="dashed">A dashed border.</p>
<p class="solid">A solid border.</p>
<p class="double">A double border.</p>
<p class="groove">A groove border.</p>
<p class="ridge">A ridge border.</p>
<p class="inset">An inset border.</p>
<p class="outset">An outset border.</p>
<p class="none">No border.</p>
<p class="hidden">A hidden border.</p>
<p class="mix">A mixed border.</p>
</body></html>
```

A dotted border.

A dashed border.

A solid border.

A double border.

A groove border.

A ridge border.

An inset border.

An outset border.

No border.

A hidden border.

A mixed border.

CSS (border)

```
<html>
<head>
<style>
p {
  border-top-style: dotted;
  border-right-style: solid;
  border-bottom-style: dotted;
  border-left-style: solid;
}
</style>
</head>
<body>
<p>2 different border styles.</p>
</body>
</html>
```

2 different border styles.

CSS (border)

```
<html><head>
<style>
p.normal {
    border: 2px solid red;
}
p.round1 {
    border: 2px solid red;
    border-radius: 5px;
}
p.round2 {
    border: 2px solid red;
    border-radius: 8px;
}
p.round3 {
    border: 2px solid red;
    border-radius: 12px;
}
</style>
</head>
<body>
<p class="normal">Normal border</p>
<p class="round1">Round border</p>
<p class="round2">Rounder border</p>
<p class="round3">Roundest border</p>
</body></html>
```

Normal border

Round border

Rounder border

Roundest border

CSS (margin)

```
<html>
<head>
<style>
div {
    border: 1px solid black;
    margin: 25px 50px 75px 100px;
    background-color: lightblue;
}
</style>
</head>
<body>
<h2>The margin shorthand property - 4
values</h2>
<div>This div element has a top margin of 25px,
a right margin of 50px, a bottom margin of
75px, and a left margin of 100px.</div>
<hr>
</body>
</html>
```

The margin shorthand property - 4 values

This div element has a top margin of 25px, a right margin of 50px, a bottom margin of 75px, and a left margin of 100px.

CSS (table)

```
<html><head><style>
#customers {
  font-family: "Trebuchet MS", Arial, Helvetica, sans-serif;
  border-collapse: collapse;
  width: 100%;
}
#customers td, #customers th {
  border: 1px solid #ddd;
  padding: 8px;
}
#customers tr:nth-child(even){background-color: #f2f2f2;}
#customers tr:hover {background-color: #ddd;}
#customers th {
  padding-top: 12px;
  padding-bottom: 12px;
  text-align: left;
  background-color: #4CAF50;
  color: white;
}
</style></head>
<body>
<table id="customers">
  <tr><th>Company</th><th>Contact</th><th>Country</th></tr>
  <tr><td>Alfreds Futterkiste</td><td>Maria Anders</td>
<td>Germany</td></tr>
```

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Berglunds snabbköp	Christina Berglund	Sweden
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria
Island Trading	Helen Bennett	UK
Königlich Essen	Philip Cramer	Germany
Laughing Bacchus Winecellars	Yoshi Tannamuri	Canada
Magazzini Alimentari Riuniti	Giovanni Rovelli	Italy
North/South	Simon Crowther	UK
Paris spécialités	Marie Bertrand	France

CSS (table)

```
<html><head><style>
table {
  border-collapse: collapse;
  width: 100%;
}
th, td {
  padding: 8px;
  text-align: left;
  border-bottom: 1px solid #ddd;
}
tr:hover {background-color:#f5f5f5;}
</style>
</head>
<body>
<h2>Hoverable Table</h2>
<p>Move the mouse over the table rows to see the
effect.</p>
<table>
  <tr>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Points</th>
  </tr>
  <tr>
    <td>Peter</td>
```

Hoverable Table

Move the mouse over the table rows to see the effect.

First Name	Last Name	Points
Peter	Griffin	\$100
Lois	Griffin	\$150
Joe	Swanson	\$300
Cleveland	Brown	\$250

CSS (form)

```
<html>
<head>
<style>
input[type=text] {
  width: 100%;
  padding: 12px 20px;
  margin: 8px 0;
  box-sizing: border-box;
  border: 2px solid red;
  border-radius: 4px;
}
</style>
</head>
<body>
<p>Text fields with borders:</p>
<form>
  <label for="fname">First Name</label>
  <input type="text" id="fname" name="fname">
  <label for="lname">Last Name</label>
  <input type="text" id="lname" name="lname">
</form>
</body>
</html>
```

Text fields with borders:

First Name

Last Name

CSS (form)

```
<html><head><style>
input[type=text] {
  width: 100%;
  padding: 12px 20px;
  margin: 8px 0;
  box-sizing: border-box;
  border: 1px solid #555;
  outline: none;
}
input[type=text]:focus {
  background-color: lightblue;
}
</style></head>
<body>
<p>In this example, we use the :focus selector to add a
background color to the text field when it gets focused
(clicked on):</p>
<form>
  <label for="fname">First Name</label>
  <input type="text" id="fname" name="fname" value="John">
  <label for="lname">Last Name</label>
  <input type="text" id="lname" name="lname" value="Doe">
</form>
</body></html>
```

In this example, we use the `:focus` selector to add a background color to the text field when it gets focused (clicked on):

First Name

John|

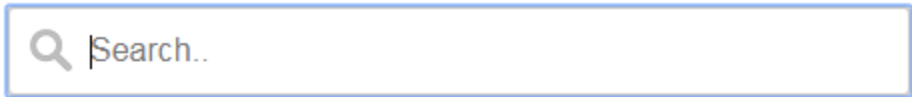
Last Name

Doe

CSS (form)

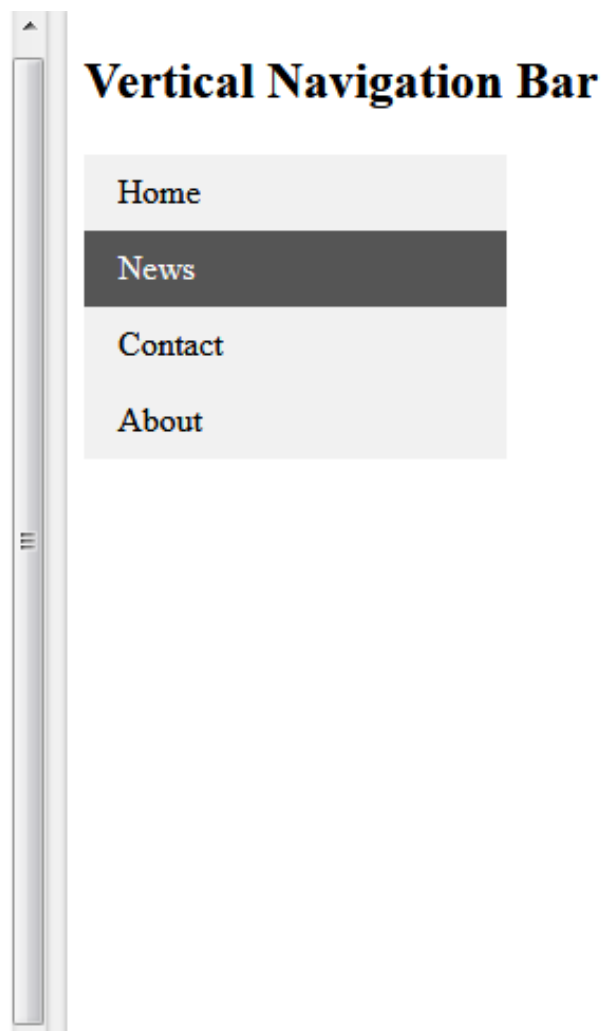
```
<html><head><style>
input[type=text] {
  width: 100%;
  box-sizing: border-box;
  border: 2px solid #ccc;
  border-radius: 4px;
  font-size: 16px;
  background-color: white;
  background-image: url('searchicon.png');
  background-position: 10px 10px;
  background-repeat: no-repeat;
  padding: 12px 20px 12px 40px;
}
</style></head>
<body>
<p>Input with icon:</p>
<form>
  <input type="text" name="search"
placeholder="Search..">
</form>
</body>
</html>
```

Input with icon:



CSS (Navi bar)

```
<html><head><style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 200px;
  background-color: #f1f1f1;
}
li a {
  display: block;
  color: #000;
  padding: 8px 16px;
  text-decoration: none;
}
li a:hover {
  background-color: #555;
  color: white;
}
</style></head>
<body><h2>Vertical Navigation Bar</h2>
<ul>
  <li><a href="#home">Home</a></li>
  <li><a href="#news">News</a></li>
  <li><a href="#contact">Contact</a></li>
  <li><a href="#about">About</a></li>
</ul>
</body></html>
```



CSS (Navi bar)

```
<html><head><style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 200px;
  background-color: #f1f1f1;
  border: 1px solid #555;
}
li a {
  display: block;
  color: #000;
  padding: 8px 16px;
  text-decoration: none;
}
li {
  text-align: center;
  border-bottom: 1px solid #555;
}
li:last-child {
  border-bottom: none;
}
li a.active {
  background-color: #4CAF50;
  color: white;
}
```

```
li a:hover:not(.active) {
  background-color: #555;
  color: white;
}
</style></head>
<body>
<h2>Vertical Navigation Bar</h2>
<p>In this example, we center the navigation links
and add a border to the navigation bar.</p>
<ul>
  <li><a class="active" href="#home">Home</a></li>
  <li><a href="#news">News</a></li>
  <li><a href="#contact">Contact</a></li>
  <li><a href="#about">About</a></li>
</ul>
</body></html>
```

Vertical Navigation Bar

In this example, we center the navigation links and add a border to the navigation bar.



Home
News
Contact
About

CSS (Navi bar)

```
<html><head><style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  background-color: #333;
}
li {
  float: left;
}
li a {
  display: block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}
li a:hover:not(.active) {
  background-color: #111;
}
.active {
  background-color: #4CAF50;
}
</style></head>
```

```
<body>
<ul>
  <li><a class="active"
href="#home">Home</a></li>
  <li><a href="#news">News</a></li>
  <li><a
href="#contact">Contact</a></li>
  <li><a href="#about">About</a></li>
</ul>
</body></html>
```



CSS (dropdown)

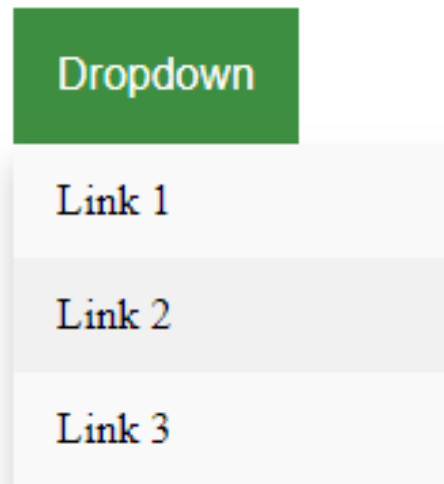
```
<html><head><style>
.dropbtn {
  background-color: #4CAF50;
  color: white;
  padding: 16px;
  font-size: 16px;
  border: none;
  cursor: pointer;
}
.dropdown {
  position: relative;
  display: inline-block;
}
.dropdown-content {
  display: none;
  position: absolute;
  background-color: #f9f9f9;
  min-width: 160px;
  box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
  z-index: 1;
}
.dropdown-content a {
  color: black;
  padding: 12px 16px;
  text-decoration: none;
  display: block;
}
```

```
.dropdown-content a:hover {background-color:
#f1f1f1}
.dropdown:hover .dropdown-content {
  display: block;
}
.dropdown:hover .dropbtn {
  background-color: #3e8e41;
}
</style></head>
<body>
<h2>Dropdown Menu</h2>
<p>Move the mouse over the button to open the
dropdown menu.</p>
<div class="dropdown">
  <button class="dropbtn">Dropdown</button>
  <div class="dropdown-content">
    <a href="#">Link 1</a>
    <a href="#">Link 2</a>
    <a href="#">Link 3</a>
  </div>
</div>
<p><strong>Note:</strong> We use href="#" for test
links. In a real web site this would be URLs.</p>
</body></html>
```

CSS (dropdown)

Dropdown Menu

Move the mouse over the button to open the dropdown menu.



or test links. In a real web site this would

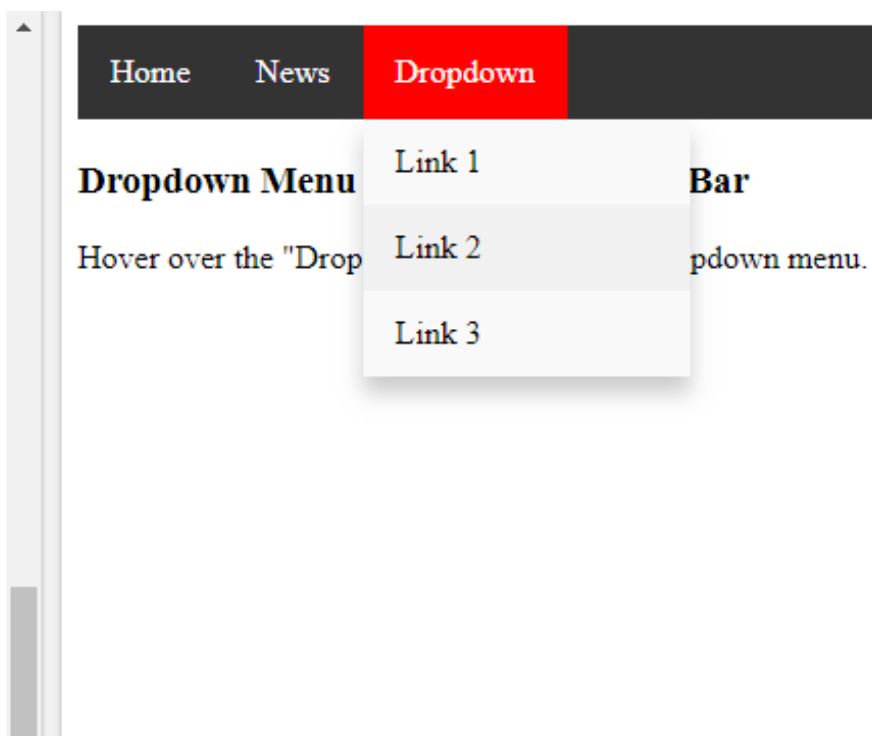
CSS (dropdown)

```
<html><head><style>
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  overflow: hidden;
  background-color: #333;
}
li {
  float: left;
}
li a, .dropbtn {
  display: inline-block;
  color: white;
  text-align: center;
  padding: 14px 16px;
  text-decoration: none;
}
li a:hover, .dropdown:hover .dropbtn {
  background-color: red;
}
li.dropdown {
  display: inline-block;
}
```

```
.dropdown-content {
  display: none;
  position: absolute;
  background-color: #f9f9f9;
  min-width: 160px;
  box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
  z-index: 1;
}
.dropdown-content a {
  color: black;
  padding: 12px 16px;
  text-decoration: none;
  display: block;
  text-align: left;
}
.dropdown-content a:hover {background-color: #f1f1f1}
.dropdown:hover .dropdown-content {
  display: block;
}
</style></head>
```

CSS (dropdown)

```
<body>
<ul>
  <li><a href="#home">Home</a></li>
  <li><a href="#news">News</a></li>
  <li class="dropdown">
    <a href="javascript:void(0)"
class="dropbtn">Dropdown</a>
    <div class="dropdown-content">
      <a href="#">Link 1</a>
      <a href="#">Link 2</a>
      <a href="#">Link 3</a>
    </div>
  </li>
</ul>
<h3>Dropdown Menu inside a Navigation Bar</h3>
<p>Hover over the "Dropdown" link to see the
dropdown menu.</p>
</body></html>
```



CSS

■ CSS định dạng hiển thị text và hình ảnh

- Ví dụ 6 :

```
h1
```

```
{
```

```
width:100%;
```

```
filter:glow;
```

```
}
```

CSS

■ CSS định dạng hiển thị text và hình ảnh

Different Filters

Note: Some of the Filter properties will not work unless the background-color property is set to transparent!

Property	Argument	Description	Example
alpha	opacity finishopacity style startx starty finishx finisly	Allows you to set the opacity of the element	filter: alpha (opacity=20, finishopacity=100, style=1, startx=0, starty=0, finishx=140, finisly=270)
blur	add direction strength	Makes the element blur	filter: blur (add=true, direction=90, strength=6);
chroma	color	Makes the specified color transparent	filter: chroma (color=#ff0000)
fliph	none	Flips the element horizontally	filter: fliph;
flipv	none	Flips the element vertically	filter: flipv;
glow	color strength	Makes the element glow	filter: glow (color=#ff0000, strength=5);
gray	none	Renders the element in black and white	filter: gray;

CSS

■ CSS định dạng hiển thị text và hình ảnh

invert	none	Renders the element in its reverse color and brightness values	filter:invert;
mask	color	Renders the element with the specified background color, and transparent foreground color	filter:mask (color=#ff0000);
shadow	color direction	Renders the element with a shadow	filter:shadow (color=#ff0000, direction=90);
dropshadow	color offx offy positive	Renders the element with a dropshadow	filter:dropshadow (color=#ff0000, offx=5, offy=5, positive=true);
wave	add freq lightstrength phase strength	Renders the element like a wave	filter:wave (add=true, freq=1, lightstrength=3, phase=0, strength=5)
xray	none	Renders the element in black and white with reverse color and brightness values	filter:xray;

CSS

```
<html>
<head>
<style>
h2
{
width:100%;
}
</style>
</head>

<body>

<h2 style="filter:glow()">Glow</h2>
<h2 style="filter:blur()">Blur</h2>
<h2 style="filter:flipH()">Flip H</h2>
<h2 style="filter:flipV()">Flip V</h2>
<h2 style="filter:shadow()">Shadow</h2>
<h2 style="filter:dropshadow()">Drop Shadow</h2>
<h2 style="filter:wave(Strength=2)">Wave</h2>

<p>NOTE: Filters don't work if the width property
of the element is not set.</p>
</body>
</html>
```

Glow

Blur

Flip H

Flip V

Shadow

Drop Shadow

Wave

NOTE: Filters don't work if the width property of
the element is not set

CSS

```
<style>
div
{
width:160px;
height:120px;
}
</style>
</head>
<body>

Alpha:
<div style="filter:alpha(Opacity=20) ">

</div>

Gray:
<div style="filter:gray() ">

</div>

Invert:
<div style="filter:invert() ">

<body>
<h1 id="header">My header</h1>
<script type="text/javascript">
document.getElementById('header').style.color="red"
</script>
</body>
</html>
```

DOM

```
<html>
<body>

<h1 id="header">My header</h1>

<script type="text/javascript">
document.getElementById
('header').style.color="red"
</script>

<p><b>Note:</b> It is the script that changes
the style of the element!</p>

</body>
</html>
```

My header

Note: It is the script that changes the style of the element!

DOM

```
<html>
<body>



<script type="text/javascript">
document.getElementById('image').src="landscape.jpg"
</script>

<p><b>Note:</b> The original image was a smiley,
but the script changes the source to a landscape
image!</p>

</body>
</html>
```



Note: The original image was a smiley, but the script changes the source to a landscape image!

DOM

```
<html>
<body>

<h1 id="header">Old header</h1>

<script type="text/javascript">
document.getElementById
('header').innerHTML="New header"
</script>

<p>Note that the original text was "Old
header"!</p>

</body>
</html>
```

New header

Note that the original text was "Old header"!

DOM

```
<html>
<head>

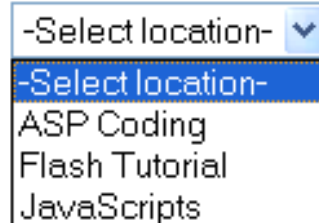
<script type="text/javascript">

function go()
{
location=document.forms[0].gowhere.value
}

</script>

</head>
<body>

<form>
<select id="gowhere" onchange="go()" >
<option>-Select location-
<option value="/asp/default.asp">ASP Coding
<option value="/flash/default.asp">Flash
Tutorial
<option value="/js/default.asp">JavaScripts
</select>
</form>
```



-Select location- ▼

- Select location-
- ASP Coding
- Flash Tutorial
- JavaScripts

DOM

```
<script type="text/javascript">
function selMultiple()
{
document.getElementById
("mySelect").multiple=true
}
</script>
</head>
<body>
<p>Before you click on the "Select multiple"
button, try to select more than one option (by
holding down the shift or Ctrl key). Then
click on the "Select multiple" button and try
again.</p>
<form>
<select id="mySelect" size="4">
  <option>Apple</option>
  <option>Pear</option>
  <option>Banana</option>
  <option>Orange</option>
</select>
<input type="button" onclick="selMultiple()"
value="Select multiple">
</form>
</body>
```

Before you click on the "Select multiple" button, try to select more than one option (by holding down the shift or Ctrl key). Then click on the "Select multiple" button and try again.

Apple
Pear
Banana
Orange

Select multiple

DOM

```
<html><head><style>
body{font-family:arial;}
a{color:black;text-
decoration:none;font:bold}
a:hover{color:#606060}
td.menu{background:lightblue}
table.nav{
background:black;
position:relative;
font: bold 80% arial;
top:0px;
left:-135px;
}
</style>
<script type="text/javascript">
var i=-135;
var intHide;
var intShow;
var speed=3;
function showmenu() {
    clearInterval(intHide);
    intShow=setInterval("show()",10);
}
```

```
function hidemenu(){
    clearInterval(intShow);
    intHide=setInterval("hide()",100);
}
function show(){
if (i<-12) {
    i=i+speed; document.getElementById('myMenu').style.left=i; }
}
function hide() {
if (i>-135) {
    i=i-speed; document.getElementById('myMenu').style.left=i; }
}
</script></head>
<body>
<table id="myMenu" class="nav" width="150" onmouseover="showmenu()"
onmouseout="hidemenu()">
<tr><td class="menu"><a href="/default.asp">HOME</a></td>
<td rowspan="5" align="center"
bgcolor="#FF8080">M<br>E<br>N<br>U</td></tr>
<tr><td class="menu"><a href="/asp/default.asp">ASP</a></td></tr>
<tr><td class="menu"><a href="/js/default.asp">JavaScript</a></td></tr>
<tr><td class="menu"><a href="default.asp">DHTML</a></td></tr>
<tr><td class="menu"><a href="/vbscript/default.asp">VBScript</a>
</td></tr>
</table>
<p>Mouse over the MENU to show/hide the menu</p>
<p>Try changing the "speed" variable in the script, to change the
menus's sliding speed</p>
</body></html>
```

DOM

HOME	M E N U
ASP	
JavaScript	
DHTML	
VBScript	

Mouse over the MENU to show/hide the menu

Try changing the "speed" variable in the script, to change the menu's sliding speed

DOM

```
<html>
<head>
<script type="text/javascript">
function currLocation()
{
alert(window.location)
}
function newLocation()
{
window.location="http://www.w3schools.com"
}
</script>
</head>

<body>
<input type="button" onclick="currLocation()"
value="Show current URL">
<input type="button" onclick="newLocation()"
value="Change URL">
</body>
</html>
```

Show current URL

Change URL

Microsoft Internet Explorer



http://www.w3schools.com/js/tryit_view.asp?filename=tryjs_location

OK

DOM

```
<html>
<head>
<script type="text/javascript">
function printpage()
{
window.print()
}
</script>
</head>

<body>
<form>
<input type="button" value="Print this page"
onclick="printpage()" ">
</form>
</body>

</html>
```

Edit the text above, and click on the button to see t

Done

Print this page

Print

General Options

Select Printer

- FinePrint 2000
- HP LaserJet 2300 Series PCL 6
- HP LaserJet 5100 PCL 6

Status: Ready ☐ Print to file Preferences

Location: Find Printer...

Comment:

Page Range

☒ All ☐ Selection ☐ Current Page

☐ Pages: 1

Number of copies: 1

☒ Collate

Enter either a single page number or a single page range. For example, 5-12

1 2 3 1 2 3

Print Cancel Apply

-
- Giới thiệu
 - Cascading Style Sheets (CSS)
 - Document Object Model (DOM)
 - **Sự kiện (events)**

Events

HTML 4.0 Event Handlers

Event	Occurs when...
onabort	a user aborts page loading
onblur	a user leaves an object
onchange	a user changes the value of an object
onclick	a user clicks on an object
ondblclick	a user double-clicks on an object
onfocus	a user makes an object active
onkeydown	a keyboard key is on its way down
onkeypress	a keyboard key is pressed
onkeyup	a keyboard key is released
onload	a page is finished loading. Note: In Netscape this event occurs during the loading of a page!
onmousedown	a user presses a mouse-button
onmousemove	a cursor moves on an object
onmouseover	a cursor moves over an object
onmouseout	a cursor moves off an object
onmouseup	a user releases a mouse-button
onreset	a user resets a form
onselect	a user selects content on a page
onsubmit	a user submits a form
onunload	a user closes a page

Events

```
<html>
<body>

<h1 onmouseover="style.color='red'"
onmouseout="style.color='black'">
Mouse over this text</h1>

</body>
</html>
```

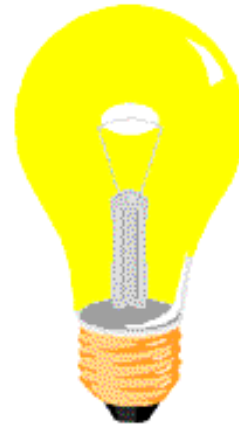
Mouse over this text

Events

```
<head>
<script type="text/javascript">
cc=0
function changeimage()
{
if (cc==0)
{
cc=1
document.getElementById('myimage').src="bulbon.gif"
}
else
{
cc=0
document.getElementById('myimage').src="bulboff.gif"
}
}
</script>
</head>

<body>


<p>Click to turn on/off the light</p>
```



Click to turn on/off the light

Events

```
<html>
<head>
<script type="text/javascript">
function lighton()
{
document.getElementById('myimage').src="bulbon.gif"
}
function lightoff()
{
document.getElementById('myimage').src="bulboff.gif"
}
</script>
</head>

<body>

<p>Click to turn on the light</p>
</body>
</html>
```



Click to turn on the light

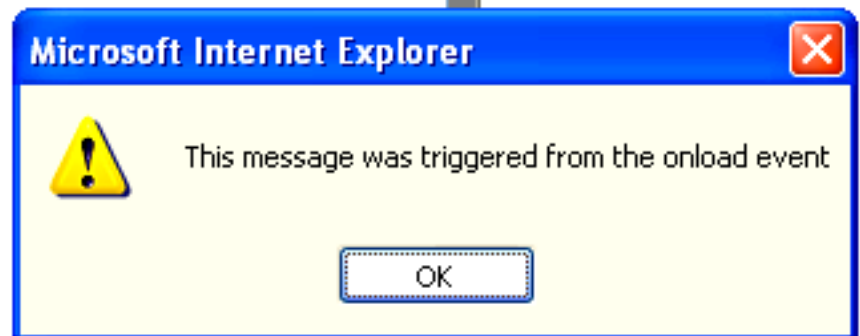
Events

```
<html>
<head>

<script type="text/javascript">
function mymessage()
{
alert("This message was triggered from the onload event")
}
</script>
</head>

<body onload="mymessage()" >
</body>

</html>
```



Events

```
<html>
<head>

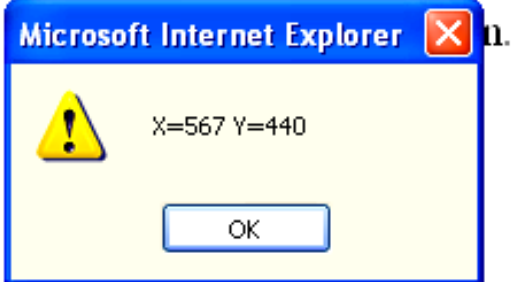
<script type="text/javascript">
function coordinates(event)
{
x=event.screenX
y=event.screenY
alert("X=" + x + " Y=" + y)
}

</script>
</head>
<body onmousedown="coordinates(event)">

<p>
Click somewhere in the document. An alert
box will alert the x and y coordinates of
the cursor, relative to the screen.
</p>

</body>
</html>
```

Click somewhere in the document. An alert box will alert the x and y coordinates of the



-
- Ví dụ về DHTML
 - <http://www.w3schools.com>

Note: Most of the examples require IE 4.0+, Netscape 7+, Mozilla, Firefox 1.0, or Opera 7+!

CSS

[Position: relative](#)

[Position: relative](#)

[Position: absolute](#)

[Visibility](#)

[Z-index](#)

[Z-index Vice Versa](#)

[Cursors](#)

[Filters](#) IE only

[Filters on Images](#) IE only

[Filter: mask image](#) IE only

[Filter: mask text](#) IE only

[Filter light effect](#) IE only

[Filter moving light effect](#) IE only

[Watermark](#)

[Change background color](#)

Events

[onload](#)

[onunload](#)

[onchange](#)

[onsubmit](#)

[onreset](#)

[onselect](#)

[onblur](#)

[onfocus](#)

[ontocus](#)
[onkeydown](#)
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[onkeydown vs onkeyup](#)
[onkeypress](#)
[onmouseover & onmouseout](#)
[onclick](#)
[ondblclick](#)
[onmousedown & onmouseup](#)
[onmousemove](#)
[Disable right-click](#) IE only

Text

[Element access](#)
[Attribute change](#)
[innerHTML access](#)
[Change innerHTML](#)
[Change position](#)
[onmousemove](#)
[onload & onunload](#)
[Tooltip](#)
[Typewrite message](#)
[Bigger text](#)
[Dynamic fx](#)
[Scrolling text](#)
[Blinking header](#)
[Glowing header](#) IE only
[Drop shadow header](#) IE only

Input Forms

Identical forms

Identical forms 2

Change background color of an input field

Change text color of an input field

Insert background image to an input field

Change background color of a radio button IE and Opera only

Insert background image to a radio button IE and Opera only

Select all check-boxes

Change background color of a checkbox Opera only

Insert background image to a checkbox IE and Opera only

Change background color of a button

Change text color of a button

Insert background image to a button

Change background color of a drop-down list IE and Opera only

Change text color of a drop-down list IE and Opera only

Change background color of a textarea

Change text color of a textarea

Insert background image to a textarea

Images

Preload image

Change the size of an image

Change the source of an image

Change the size & the source of an image

Change the position of an image

Change the background image

Moving image

Drag and drop the image IE and Opera only

Image viewer

A button with a background image IE and Opera only

Shaking image

[Digital clock](#)

Filter on Images

[From black and white to color](#) IE only

[Gradually show image](#) IE only

[Negative image](#) IE only

[XRay image](#) IE only

[The mask filter](#) IE only

[Move the mask](#) IE only

Window

[Shake the window](#)

Links

[Text transform](#)

[Letter spacing](#)

[Blinking link](#)

[Glowing link](#) IE only

[Drop shadow link](#) IE only

[Wave link](#) IE only

[Shadow link](#) IE only

[Shaking link](#)

[Alpha image link](#) IE only

[Gray image link](#) IE only

[Random Banner](#)

Menus

[Top navigation](#) IE only

[Left navigation](#) IE and Opera only

[Drop down navigation \(select box\)](#)

[Top drop down](#) IE and Opera only

[Always-on-top](#) IE and Opera only

[Inset borders](#) IE and Opera only

[Description menu](#)

[Description image](#)

[Cursor description](#) IE and Opera only

[Cursor image](#) IE and Opera only

[Gray/Color image menu](#) IE only

[Sliding Vertically](#) IE and Opera only

[Click sliding Vertically](#) IE and Opera only

[Sliding horizontal](#)

[Click sliding horizontal](#)

Cursor

[Cursor position](#) IE only

[Cursor text](#) IE only

[Cursor image](#) IE only

[Easy cursor trail](#) IE only

Page Enter Effects

Fade in IE only

Square in IE only

Square out IE only

Circle in IE only

Circle out IE only

Curtain up IE only

Curtain down IE only

Curtain right IE only

Curtain left IE only

Vertical blinds IE only

Horizontal blinds IE only

Boxy vertical blinds IE only

Boxy horizontal blinds IE only

Pulverized IE only

Elevator close IE only

Elevator open IE only

Elevator horizontal close IE only

Elevator horizontal open IE only

Diagonal top right IE only

Diagonal bottom right IE only

Diagonal top left IE only

Diagonal bottom left IE only

Horizontal lines IE only

Vertical lines IE only

Random IE only



Cám ơn !